

Date: Tue, 18 May 93 04:30:22 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #600
To: Info-Hams

Info-Hams Digest Tue, 18 May 93 Volume 93 : Issue 600

Today's Topics:

 171A Tubes; Who Used them?
 Daily Solar Geophysical Data Broadcast for 17 May
 Possible to parallel x-formers??
 Radio Shack 70cm HT?!?!
 Recommend 2band HT & mailorder,etc?
 RFI from ZyXEL modem to 2way radio
 RNARS

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 18 May 93 09:49:31 GMT
From: news-mail-gateway@ucsd.edu
Subject: 171A Tubes; Who Used them?
To: info-hams@ucsd.edu

warning this message contains discussion of vacuum tubes; neophytes should
hit 'n' now!

I was recently given a large number of old tubes to add to my collection;
as well as the usual 807's, an 813, and a 304TH (wow, what a bottle!) there
were some curious beasties. They are labelled 'WE 171-A', and look like
a half-way stage between a traditional 'Acorn' tube (RCA 955 for example)
and an Octal-based tube. The glass tube envelope is almost totally
contained within the phenolic tube base; there is just a small dome of
glass sticking up above the top of the phenolic part.
I guess 'WE' in the designation gives these things as being made by Western

Electric, but I am wondering, when were these things made, and what were they used for?

With the phenolic tube-base, the losses must have been higher than the all-glass RCA Acorn-tubes. They look to be a late-1930's design from the style of lettering used on the bases.

Also, has anyone got a spec. on the 171-A? Its not listed in my equivalents charts, but I sure would like to try firing one of these beasts up, maybe a super-regenerative FM-broadcast receiver, with a nice 6L6 for audio output...?

-Pete Lucas pjml%swmis.nsw.ac.uk@nsfnet-relay.ac.uk (Internet)
 pjml@uk.ac.nsw.swmis (JANET)

Date: 18 May 93 05:13:23 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 17 May
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 137, 05/17/93
10.7 FLUX=096.2 90-AVG=124 SSN=049 BKI=3423 2244 BAI=016
BGND-XRAY=B1.7 FLU1=1.1E+06 FLU10=1.6E+04 PKI=3322 2234 PAI=013
 BOU-DEV=034,050,010,026,013,012,045,052 DEV-AVG=030 NT SWF=00:000
 XRAY-MAX= B4.1 @ 2009UT XRAY-MIN= B1.6 @ 0857UT XRAY-AVG= B2.0
NEUTN-MAX= +003% @ 1520UT NEUTN-MIN= -002% @ 2025UT NEUTN-AVG= +0.2%
 PCA-MAX= +0.1DB @ 2305UT PCA-MIN= -0.1DB @ 1845UT PCA-AVG= +0.0DB
BOUTF-MAX=55401NT @ 0334UT BOUTF-MIN=55371NT @ 1713UT BOUTF-AVG=55388NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+000,+000,+000
GOES6-MAX=P:+129NT@ 1905UT GOES6-MIN=N:-108NT@ 0311UT G6-AVG=+095,-015,-052
 FLUXFCST=STD:090,095,100;SESC:090,095,100 BAI/PAI-FCST=015,015,010/020,015,010
 KFCST=2214 4112 2214 4112 27DAY-AP=025,027 27DAY-KP=3644 4333 4454 3433
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 16 MAY 93 was 65.9.
 The Full Kp Indices for 16 MAY 93 are: 3- 5- 1- 20 3- 2- 2- 30

Date: Tue, 18 May 1993 04:08:15 GMT
From: usc!wupost!csus.edu!netcom.com!nagle@network.UCSD.EDU
Subject: Possible to parallel x-formers??
To: info-hams@ucsd.edu

tomb@hplsla.hp.com (Tom Bruhns) writes:
>exualan@exu.ericsson.se (Alan Malkiel) writes:

>>In the junk box sit 2 different 10Amp (appx.), 18V (appx.) used
>>transformers. The question: Can I wire them in parallel? If so,
>>which is better, before or after the bridge rectifier (obviously,
>>if after, then I will need 2 bridges). Also, how much difference
>>will a volt or 2 in the secondary make? I do have access to the
>>windings so adjustments are possible.

What voltage do you want out? If you want around 15-18VDC out,
wire the two transformers in series, and treat them as a center-tapped
transformer. Now you just need two power diodes; you don't even need
a bridge.

John Nagle

Date: 17 May 93 08:28 CDT
From: usc!howland.reston.ans.net!xlink.net!sol.ctr.columbia.edu!news.kei.com!
news.oc.com!utacfd.uta.edu!trsvax!trsvax!rpo@network.UCSD.EDU
Subject: Radio Shack 70cm HT?!?!
To: info-hams@ucsd.edu

Well, I'll repost as follows:

=====

Radio Shack HTX-404 440 MHz (70 cm) Amateur UHF FM Transceiver
(Cat. No. 19-1140)

If you look at your latest copy of QST, you will find a review of
the new Radio Shack 440 MHz scanner. This is a brief summary of
the transceiver's specs. When I made a similar posting about the
HTX-202 when it first came out, I received complaints that I was
'promoting.' Note that this posting is not intended to promote, but
to inform the amateurs on the net of the unit's listed specs. I
apologize in advance to anyone that has a different definition
of 'promoting' that would include this post.

(These won't be available in quantity until mid-Summer.)

SPECIFICATIONS

General

| | |
|---------------------------|--|
| Frequency Range | 440 - 450 MHz (Modifiable to 430 - 450 MHz) |
| Frequency Steps | 5/10/15/20/25/50/100 kHz |
| Frequency Stability | +/- 10 ppm |
| Antenna Impedance | 50 Ohms Unbalanced |
| Speaker | 8 Ohms |

| | |
|------------------------------|-------------------------------|
| Microphone | Condenser Mic, 1.2 kOhms |
| Channel Display | LCD 8 digits |
| Operating Temperature | 14 to 140 deg F |
| Size | 2 9/16 x 4 5/8 x 1 7/8 Inches |
| Weight | 1 lb, 3 ozs |
| Supply Voltage | |
| Alkaline Battery Pack | 9 VDC |
| Ni-Cad Batter Pack (600 mAh) | 7.2 VDC |
| External Power Jack | 7.2 to 13.8 VDC |

Receiver

| | |
|---|-----------------------|
| 1st IF | 45 MHz |
| 2nd IF | 455 kHz |
| Sensitivity | 0.2 uV (12 dB SINAD) |
| | 0.35 uV (20 dB NQ) |
| Squelch Sensitivity | |
| Threshold | 0.1 uV |
| Tight | 10 dB above threshold |
| Spurious Response Attenuation | 60 dB |
| Intermodulation Attenuation | 60 dB |
| Adjacent Channel Rejection (25 kHz) | 50 dB |
| Modulation Acceptance Bandwidth ... | 9 kHz |
| Hum and Noise | 35 dB |
| Audio Output Power (10% THD): | |
| 7.2VDC | 0.3W |
| 9 VDC | 0.5W |
| 12 VDC | 1W |
| 13.8 VDC | 1W |
| Audio Distortion | 2% |
| Audio Response | -6 dB/Octave |
| Current Drain | |
| Standby w/Power Save | 35 mA |
| Standby wo/Power Save | 25 mA |
| CTCSS Sensitivity | 0.15 uV |
| DTMF Squelch Sensitivity | 0.2 uV |

Transmitter

| | |
|-------------------------------------|--------------|
| RF Power Output | |
| 7.2 VDC | 1.5W |
| 9 VDC | 2.5W |
| > 12 VDC | 5W |
| Low Power | 0.5W |
| Maximum Deviation | 4.5 kHz |
| Hum and Noise | 35 dB |
| Audio Distortion | 0.5% |
| Audio Response | +6 dB/Octive |
| Spurious and Harmonic Emissions ... | 70 dB |

Frequency Error +/- 0.0005%
Microphone Sensitivity 4 mV rms
CTCSS Tone Deviation 0.7 kHz
DTMF Tone Deviation 3.5 kHz
Current Drain:
 7.2 VDC 1.2A
 9 VDC 1.4A
 12 VDC 1.6A
 13.8 VDC 1.8A
 Low Power 0.8A

It includes CTCSS, DTMF, DTMF page, 16 memories, DTMF memory,
and operates almost identically to the HTX-202. Price is \$299.

For a comprehensive review, see this month's QST.

Paul Opitz
Radio Shack Publications

Date: Tue, 18 May 1993 07:11:57 GMT
From: swrinde!zaphod.mps.ohio-state.edu!sol.ctr.columbia.edu!destroyer!cs.ubc.ca!
newsserver.sfu.ca!sfu.ca!tpang@network.UCSD.EDU
Subject: Recommend 2band HT & mailorder,etc?
To: info-hams@ucsd.edu

Hello hams :),

I am thinking about buying a dual-bander 2m/70cm HT, a dual-bander mobile
antenna, and/or a dual-band mobile rig, plus a slide-out mount.

Actually I wanted to set up a dual-band system at home, on mobile, and
on portable, but I don't want to spend on 3 dual-band rigs, which will be
very expensive for me, and redundant in purpose. The mobile operation is
the most headache, because there is complication in installation, RFI, etc.

For HT in car op. style:

I want to save money, but running an antenna cable, DC cable, external
speaker cable, and hand-mic is no fun, with all the wires running around, and
I still need a place to put the HT. Another problem is there is no single
dual-band power-amp which will allow true full-duplex op, so I need 2 amps
and a band-splitter and 2 antennas (might as well).

So I thought of buying dual-band mobile rig to save all the hassle, but I
also want it to be used at home (otherwise , what a waste). So I thought
of those slide-out mount. My local Radio-Shack is clearing them out at \$5.
and only 2 left. These do not have antenna thru-put (at least not RF high-

power) so I still have to disconnect the antenna manually. Our local ham store has those with antenna hook-up, don't know how good the connection is (cause I don't see 50 ohm style connection being used in the junction), but cost \$150! (yes, I can buy 30 of the Radio-Shack kind :) On reading the Honda thread worries me, I notice some noise when I listen to my HT with rubber-duck in my car: a Kenwood TH-215.

I have already figured out my portable :) and my home operation, except my computer system (monitor and modem especially) is generating noise on my HT.

So here is the question on the above:

1. What do you recommend?
2. How to limit noise at home?
3. What mobile antenna would you recommend (relatively high-gain dual band)?
4. What kind of antenna to use on my balcony (2nd floor) in my apartment complex, which has a restriction on putting "objects" on the balcony, include antenna?
5. Where is a recommend mail-order place for all these (US ?) ? Since I saw the price is quite high locally, and I am not going to Asia soon :(. I want reliable service, and relatively good pricing.

Which new dual band mobile rig has N-type connector in case I have to disconnect it manually a lot based on above scenerio? (No SO-259 :)?

Which model would you recommend, or brand, from Kenwood, Icom, Yaesu?

(I think I'll only buy these brands, since Standard is not sold locally, and I worried about service, and I don't like Alinco, Azden has no high-end model).

Same question for HT? I have been trying to look for comparison on the Kenwood TH-78A, Icom IC-21AT, Yaesu FT-530. Each has some features which are unique and I want. What is the dual-mic and whisper mode for the Icom 21AT? Are all 3 can get Air-band? How is each sensitivity on out of band receive? like 800MHz band, etc? (because I might save money by not have to buy a scanner :) Also, are all capable of doing packet well?

How do you prevent your Diamond (or some other fancy looking ones) antenna from stolen on your car? My alarm only protects what's inside. Long ago, a friend said one could drill thru the connector area, and put a screw thru it (of course not in the middle :) SHORT!). I prefer a 5/8-2m/70cm because of the gain, but a 1/4 steel-whip might not be as suseptable to being stolen or vandalized. I don't drive very nice car, so I don't think I want to upgrade my alarm to surround sensing ones.

Is it expensive if I want a professional installation in my car? To make sure all the RFI, from the car is not getting in my radio?

Ok, I know this is TONS OF QUESTIONS! I have been doing research and reading

and visiting my local ham store, (and going to a local club event soon), plus I am not a new-comer per-se. I am not a take-all-but-no-give either, I post and reply to lots of groups, especially on some computer groups. This is quite a long bandwidth, and I hope it is not too annoying to some.

My last question, (which i posted to .policy, but somehow didn't get thru), is about reciprocal licensing. I'll receive my license by next week, with Advanced class here in Canada, which kind of class will I operate as in the USA (I know it's automatic reciprocal)? How about Hong Kong? Do I need Morse Code for a Hong Kong reciprocal (somebody said I need, but I don't think so)?

E-mail is appreciated, and I'll certainly check this group, all comments are welcome, and if enough post/replies, I'll get a summary out.

Thank you very much in advanced, and for the bandwidth too.

73,

Regards,
David

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| In real life: David Tse      E-mail: tpang@sfu.ca (Internet)      |
| Snail Mail: P.O. Box 26052, Richmond, B.C., V6Y 1Z3, Canada    |
| Home: Amiga A3000/25/100/6 + AMaxII + ZyXEL U-1496E + HP DeskJet PLUS |
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Date: Tue, 18 May 1993 09:08:51 GMT
From: usc!howland.reston.ans.net!wupost!gumby!destroyer!cs.ubc.ca!
newsserver.sfu.ca!sfu.ca!tpang@network.UCSD.EDU
Subject: RFI from ZyXEL modem to 2way radio
To: info-hams@ucsd.edu
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ZyXEL U-1496E is a high-speed external modem, which uses a 68000 uP and 2 DSP chips at 13MHz and 40MHz respectively, inside a plastic case with no metal/iron RFI shielding. How does it pass FCC as class B?

I am setting up some 2 way radio system near my computer system, a CB handheld getting power from a power-supply (unfortunately, from same wall outlet to 2 power bars), and a 2 meter (144MHz) handheld now. I am going to set up more on the 2 meter ham band equipment later.

I am experiencing RFI from both my MAG MV-14S, and my ZyXEL modem, but not from my Amiga 3000 (by simple isolation test), which makes noise on both CB and 2m frequencies on the receivers.

I will be doing some mods to my ZyXEL, so I want to know, for convenience

sake, if I could add some metal/iron to shield the ZyXEL plastic case, internally or externally (ugly :). Is it just e-field to be shielded, i.e. Aluminum foil is ok. Or magnetic field? which I need iron/steel to do?

I am cross-posting to 3 groups, since it does cover all areas, and hope it's not wasting too much bandwidth.

Thanks for any info, e-mail is appreciated, and I'll certainly check these groups.

Thanks in advanced,

Regards,
David

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-----  
| In real life: David Tse      E-mail: tpang@sfu.ca (Internet)      |  
| Snail Mail: P.O. Box 26052, Richmond, B.C., V6Y 1Z3, Canada    |  
| Home: Amiga A3000/25/100/6 + AMaxII + ZyXEL U-1496E + HP DeskJet PLUS |  
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Date: 18 May 93 10:29:08 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: RNARS  
To: info-hams@ucsd.edu
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Hi Wolf,

I'm an RNARS member, I think the number is 3961.

73,

Paul

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GW7KES, VP8CMF.

Packet: GW7KES@GB70NV.#45.GBR.EU Internet: unixa.nerc-barry.ac.uk

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End of Info-Hams Digest V93 #600
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